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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/647,155	03/01/2001	Peter Hedenberg	111848	5276

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YOUNG & THOMPSON
745 SOUTH 23RD STREET 2ND FLOOR
ARLINGTON, VA 22202

EXAMINER	
COLE, ELIZABETH M	

ART UNIT	PAPER NUMBER
1771	10

DATE MAILED: 09/13/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Application No.	Applicant(s)	
09/647,155	HEDENBERG ET AL.	
Examiner	**Art Unit**	
Elizabeth M Cole	1771	

Office Action Summary

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 February 2002* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *14-25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *14-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

1. Claim 14 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 14 recites that the layers 2 and 3 are "mutually connected by the material laminate (1)". This limitation renders the claim vague and indefinite because numeral (1) is used in the instant drawings to denote the entire laminate and it is therefore not clear how the entire laminate can be connecting two layers of the laminate, i.e., to say the layers are mutually connected by a third element of the claim implies that the third element is a bond element, but (1) refers to the overall material not to a bond element.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 14-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buerger et al, U.S. Patent NO. 5,652,041 in view of WO 97/02133 to Zelazoski et al. Buerger et al discloses a two layered material comprising a first nonwoven fabric and a second nonwoven layer formed from carded fibers. See col. 6, lines 6-8. The two layers are thermally bonded together by means of a series of point bonds. The bonds may be circular or square in shape. See col. 6, lines 49-51. The bonds may be formed in groups wherein the point bonds in a group are closer to each other than they are to the bonds in another group. See fig. 6. Since the first layer generally has a thickness of about 0.01 to 1 mm and the depth of bonding is generally 0.015 to 0.070 inch, the

bonded areas extend through the thickness of the first layer, (see col. 5, lines 54-56 and col. 6, lines 57-58). Since the material in the bonded areas is compressed, the bonded areas would necessarily and inherently have a higher density than the unbonded areas. The shortest relative distance *x* between two groups of bonding sites, which two groups are situated adjacent to each other, is at least twice as great as the greatest relative distance *y* between two bonding sites which are arranged adjacent to each other within the groups, as shown in figure 6. Buerger et al discloses a fabric laminate as set forth above. Buerger et al differs from the claimed invention because Buerger et al does not disclose the thickness of the second layer and does not disclose that the distance *x* is 2-6 mm and *y* is 0.5-1 mm, (wherein x and y are defined in claim 10). With regard to the thickness of the second layer, Buerger teaches that the staple layer provides softness, absorbency, and drapability and should have a weight of 10-80 gm/m^2. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have selected the second layer so that it had a suitable thickness within the guidelines set forth by Buerger to provide the desired softness, absorbency, drapability and had a weight within the range set forth in Buerger. With regard to the distance x and y, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have optimized the distance x and y in view of figure 6, and also taking into account the dimensions of the laminate in order to arrive at a laminate which had sufficient integrity and which also remained soft, absorbent and drapability. Buerger et al teaches that the amount and pattern of bonding directly affects the strength of the individual layers and of the laminate. Therefore, the amount and pattern of bonding is a result

effective variable and it would have been obvious to have optimized the bonding pattern and amount. One of ordinary skill in the art would have been motivated to optimize the bonding pattern and amount by the expectation that the optimum pattern and amount of bonding would result in a strong laminate which was also strong, absorbent and drapable.

Buerger et al differs from the claimed invention because Buerger et al does not disclose that the bond sites comprise lines and does not disclose employing the layer as the body side liner in an absorbent article, although Buerger et al does teach employing the laminated fabric in absorbent articles, towel, wipes, etc. Zelazoski et al teaches that bonded two layer fabrics may be employed as the body side layer in absorbent articles. Zelazoski et al teaches that such bonded fabrics are particularly desirable because the more dense regions around the bonded areas serve to draw fluids into the fabric so that they can be absorbed by the absorbent core of an absorbent article. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have employed the material of Buerger et al as the body side liner of an absorbent pad as taught by Zelazoski. One of ordinary skill in the art would have been motivated to employ the fabric of Buerger et al as a body side liner by the teaching of Buerger et al that such fabrics are particularly effective at drawing fluids into the absorbent pad rather than allowing them to stay on the surface of the pad. Additionally, One of ordinary skill in the art at the time the invention was made would have been motivated to employ the Buerger et al fabric as a body side layer because Zelazoski et al teaches that such fabrics are useful as body side liners and because the Buerger et al fabric is strong, soft, absorbent and drapable.

Similarly, with regard to the limitations that the bond sites comprise lines, Zelazoski et al teaches that forming thermal bonds in laminates comprising nonwoven fabrics enhances the ability of the fabric to transport liquids because the areas comprising the bond lines are more dense than the unbonded areas and liquids are drawn toward the more dense areas. See abstract. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the bond sites in Buerger et al so that they comprised lines. One of ordinary skill in the art would have been motivated to form the bonds in the bond sites as lines because of the teaching of Zelazoski et al that forming linear bonds enhances the over all absorbency and fluid transport properties of the fabric.

4. Applicant's arguments filed 7/15/02 have been fully considered but they are not persuasive. Applicant argues that Buerger et al is not concerned with improving fluid acquisition in an absorbent product. However, Buerger does disclose that the fabric can be employed in diapers, and additionally teaches that the fabric is useful as a wiper or towel, which both require good absorbency. Applicant argues that since Zelazoski teaches employing a bonding pattern wherein the bonds comprise lines, it would have been not have been obvious to employ other bonding patterns. However, since Zelazoski teaches that the absorbency of the fabric is enhanced due to the presence of bonded and non-bonded areas because fluid is drawn to the bonded, (more dense area), one of ordinary skill in the art would have been motivated to employ the bonded fabric of Buerger because of its excellent strength, stability and tactile properties. Additionally, although the Buerger et al fabric would not be corrugated in the same manner as Zelazoski since Buerger et

al does not employ line bonds, the Buerger fabric would comprise high and low density areas and have a non-flat surface. Finally, with regard to the choice of bonding patterns, amongst the patterns disclosed in Buerger, since Buerger teaches that all the bonding patterns were useful, it would have been obvious to have employed figure 6.

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth M. Cole whose telephone number is (703) 308-0037. The examiner may be reached between 6:30 AM and 5:00 PM Monday through Thursday.

Mr. Terrel Morris, the examiner's supervisor, may be reached at (703) 308-2414.

Inquiries of a general nature may be directed to the Group Receptionist whose telephone number is (703) 308-0661.

The fax number for official faxes is (703) 872-9310. The fax number for official after final faxes is (703) 872-9311. The fax number for unofficial faxes is (703) 305-5436.

Elizabeth M. Cole
Primary Examiner
Art Unit 1771

e.m.c

September 12, 2002